

**HUN 6356 – Minerals in Nutrition
Course Syllabus (Spring 2021)**

3 credits- Two 95 minute class periods per week: 1:00-2:35 p.m. on Tuesdays and Thursdays
Each class will include a 50 minute lecture followed by a class-wide discussion of a research paper

Location: McCarty G001 with CDC Spacing. Marks and clearance are required.

Zoom link is available.

Instructors: Robert J. Cousins, Ph.D., Boston Family Professor; FSHN Department (Lead Instructor)
Office: FSHN Bldg., Room 201; Phone: 294-3705; Email: cousins@ufl.edu
Office Hours: Mondays from 10:30 to 12:00 noon. On-line by appointment only.

James F. Collins, Ph.D. Professor; FSHN Department
Office: FSHN Bldg., Room 441; Phone: 294-3746; Email: jfcollins@ufl.edu
Office Hours: Mondays from 10:00-11:30 a.m. On-line by appointment only.

Course Objectives: To provide an understanding of the roles of minerals in nutrition from biochemical and physiological perspectives. Topic area will be covered for each mineral listed below, approximately in proportion to the literature base that is available. Topics included are: Methods of Analysis, Dietary Reference Intakes, Body Composition, Status Assessment, Dietary Sources, Deficiency, Absorption, Toxicity, Metabolism, Associated Diseases, Biochemical Functions and Health Benefits/Claims.

Evaluation:	<u>Examinations</u>	<u>Value</u>
	Exam 1	40 % of grade
	Exam 2	35 % of grade
	Exam 3	25 % of grade

Exams: Three in-class exams will be given on the indicated days. The instructors will provide some information as to how to prepare for the exams.

Student Presentations: There will not be any student presentations this year. This is an accommodation because of the two stressful past semesters.

Discussion of Research Papers: Prior to each lecture a recent or classical research paper on the mineral being discussed in class will be assigned. The paper will be discussed at the next lecture. **Extra points toward the course grade can be obtained by participating in discussions about these papers.**

Recommended References: Marriott, Birt, Stalling and Yates (Eds.), *Present Knowledge in Nutrition*, 11th Ed., 2020
or

Ross, Caballero, Cousins, Tucker and Ziegler and Ziegler (Eds.), *Modern Nutrition in Health and Disease*, 11th Ed., 2013

Secondary References:

Food and Nutrition Board, Institute of Medicine, *Dietary Reference Intakes for Calcium, Phosphorous, Magnesium, Vitamin D, and Fluoride*, National Academy Press, 1997

Food and Nutrition Board, Institute of Medicine, *Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc*, National Academy Press 2001

Food and Nutrition Board Institute of Medicine, *Dietary Reference Intakes for Calcium and Vitamin D*, National Academy Press, 2010

<u>DATE</u>	<u>SUBJECT</u>	<u>INSTRUCTOR</u>
January 12	Course Introduction & Methods	Dr. Cousins
January 14	Methods/Geochemistry/Metallobiochemistry	“ “
January 19	Calcium	“ “
January 21	Calcium	“ “
January 26	Phosphorus	“ “
January 28	Phosphorus	“ “
February 2	Magnesium	“ “
February 4	Magnesium/Fluoride	“ “
February 9	Exam # 1	“ “
February 11	Iron	Dr. Collins
February 16	Iron	“ “
February 18	Iron	“ “
February 23	Copper	“ “
February 25	Copper	“ “
March 2	Chromium/Ultra trace elements	“ “
March 4	Electrolytes	“ “
March 9	Exam # 2	“ “
March 11	Zinc	Dr. Cousins
March 16	Zinc	“ “
March 18	Zinc	“ “
March 23	Manganese	“ “
March 25	Selenium	“ “
March 30	Exam # 3	“ “